

IN THE CLAIMS:

Please amend claims 1 and 10-19 and add new claims 20-22 as set forth in the listing of claims. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

5u
71
Claim 1. (Currently Amended). A method for providing and processing a cursored user interaction with a spatially displayed medical image and producing graphics related data on said medical image, wherein said method comprises the steps of:

5 providing a menu-less graphical interface for displaying, essentially unobstructed, said medical image in a substantial portion of said menu-less graphical interface;

Cy
controlling a mouse computer interface device [[,]] having at least one button;

10 displaying a pointer symbol on said graphical interface, wherein said pointer symbol represents a current position of said mouse on said graphical interface;

tracking a status of each of said at least one button;

15 detecting a position of said mouse, wherein
said position detection step is activated upon actuation of
one of the said at least one button; and

20 generating a measurement graphic related to a
predefined set of measurement operations on said medical
image upon at least one actuation of the said at least
one button; and

enabling the generation of the measurement graphics
without activation of user interface constructs.

cy
Claim 2 (Original). A method as claimed in Claim 1, wherein
a single-point actuating/positioning assigns an actual pixel
position and/or a pixel intensity quantity to the point in
question.

Claim 3 (Original). A method as claimed in Claim 1, wherein
a point pair actuating/positioning assigns a distance value to
the pair in question.

Appln. No. 09/864,107
Amdt. dated March 3, 2004
Reply to Office Action dated December 3, 2003

Claim 4 (Original). A method as claimed in Claim 1, wherein a triple-point actuating/positioning assigns an angle value quantity to a middle point of the triple.

Claim 5 (Original). A method as claimed in Claim 1, wherein multiple-point actuating/positioning for an open or closed point sequence assigns an area value quantity to a concave region delimited by the sequence in question.

CA
Claim 6 (Original). A method as claimed in Claim 1, wherein a freehand-drawn actuating/positioning for an open or closed curve assigns an area value quantity to a concave region delimited by said curve.

Claim 7 (Original). A method as claimed in Claim 1, wherein multiple-point actuating/positioning for an open or closed sequence assigns a poly-line measurement quantity to the sequence so drawn.

Claim 8 (Original). A method as claimed in Claim 1, wherein a freehand-drawn actuating/positioning for an open or closed

sequence assigns a measurement quantity to the freehand sequence so drawn.

Claim 9 (Original). A method as claimed in any of Claims 2 to 8, and furthermore assigning a pixel staticizing to an assigned geometrical entity.

C4 Claim 10 (Currently Amended). An apparatus arranged to provide and process a cursored user interaction with a spatially displayed medical image, wherein said apparatus comprises:

5 a menu-less graphical interface for displaying, essentially unobstructed, said medical image in a substantial portion of said menu-less graphical interface;

10 a pointing device having at least one button, wherein said pointing device is represented [[by]] on said graphical interface by a standardized pointer symbol and wherein said pointer symbol represents a current position of said pointing device within the context of said graphical interface;

a processor configured to detect an actuation of each of said at least one button of said pointing device and track positions of said pointing device; and

- 15 a processor-internal list of measurement operations, said measurement operations ~~[[are]]~~ being performed upon at least one actuation of the at least one button ~~[[,]]~~ and ~~produce~~ producing corresponding measurement graphics on said medical image, said processor being arranged to produce the measurement graphics based on said list of measurement operations without activation of user interface constructs.

CA Claim 11 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon a single-point actuating/positioning assigning an actual pixel position and/or a pixel intensity quantity to the point in question.

Claim 12 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon a point pair actuating/positioning assigning a distance value to the pair in question.

Claim 13 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon

Appln. No. 09/864,107
Amdt. dated March 3, 2004
Reply to Office Action dated December 3, 2003

a triple-point actuating/positioning assigning an angle value quantity to a middle point of the triple.

Claim 14 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon a multiple-point actuating/positioning for an open or closed point sequence assigning an area value quantity to a concave region delimited by the sequence in question.

cy
Claim 15 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon a freehand-drawn actuating/positioning for an open or closed curve assigning an area value quantity to a concave region delimited by said curve.

Claim 16 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon a multiple-point actuating/positioning for an open or closed sequence assigning a poly-line measurement quantity to the sequence so drawn.

Appln. No. 09/864,107
Amdt. dated March 3, 2004
Reply to Office Action dated December 3, 2003

Claim 17 (Currently Amended). An apparatus as claimed in Claim 10, ~~and having~~ further comprising assigning means for upon a freehand-drawn actuating/positioning for an open or closed sequence assigning a measurement quantity to the freehand sequence so drawn.

C4
Claim 18 (Currently Amended). An apparatus as claimed in any of Claims 11 to 17, ~~and having~~ further comprising staticizing means for ~~furthermore~~ assigning a pixel staticizing to an assigned geometrical entity.

Claim 19 (Currently Amended). A machine readable computer program, said program implementing a menu-less graphical interface and arranged for processing cursored user interaction with a spatially displayed medical image for producing graphics
5 related data on such image, for implementing a method as claimed in Claim 1, said program being ~~characterized by being~~ arranged for sensing mouse positionings and/or actuations and for ~~on the basis thereon~~ effecting inherent measuring functionalities ~~as being~~ based on relative such positionings with respect to an
10 associated imaged medical object, and for subsequently outputting

Appln. No. 09/864,107
Amdt. dated March 3, 2004
Reply to Office Action dated December 3, 2003

representations of said measuring functionalities for displaying
in association with said medical object.

Claim 20 (New). A method as claimed in claim 1, further
comprising the step of enabling the generation of the measurement
graphic based solely on actuation of said at least one button of
said mouse on said medical image.

C4
Claim 21 (New). A method as claimed in claim 1, further
comprising the step of enabling the generation of the measurement
graphic without requiring a user to define a type of graphic
being generated.

Claim 22 (New). A method as claimed in claim 1, wherein the
measurement graphic is generated without movement of said mouse
outside of said medical image.
